

**CIRCUIT FOR DETECTION OF HARDWARE FAULTS DUE TO
TEMPORARY POWER SUPPLY FLUCTUATIONS**

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ABSTRACT OF THE DISCLOSURE

Fast electromagnetic transient (EFT) events of short duration are often not detected by power-on reset circuitry of an integrated circuit (IC). A fault detector circuit involves many fault detectors. The fault detectors are distributed across the IC and may be embodied in spare cells left in a standard cell IC. Each fault detector is initialized with a digital logic value. The fault detector circuit is then controlled such that the digital logic value stored should not change if the IC is operated under normal operating conditions. An EFT event that is undetected by the power-on reset circuit may, however, cause one of the digital logic values stored in one of the fault detectors to switch. If the digital logic value stored in any one of the fault detectors switches, then a fault signal is provided to the power-on reset circuit that in turn resets the IC.